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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,013	06/22/2001	Karen King	18938-2363001	8492

7590

08/28/2002

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EXAMINER

SALDANO, LISA M

ART UNIT

PAPER NUMBER

3673

DATE MAILED: 08/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/888,013

Applicant(s)

KING ET AL.

Examiner

Lisa M. Saldano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13 and 15 recite the limitations wherein a "said screen" or a portion thereof is configured in a certain manner. However, prior claims from which claims 13 and 15 depend do not make prior reference to a screen. There is insufficient antecedent basis for these limitations in the claims.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kellner (877,201).

Regarding claims 1, 9 and 10, Kellner discloses a breakwater system comprising a curtain 8 and means (5,6,7) for attaching the curtain to the underwater breakwater structure. Kellner further discloses at least one floatation device 11 attached along an upper edge of the curtain.

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5. Claims 11, 12, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Waters GB 2,204,080 A.

Regarding claims 11, 12, 22 and 23, Waters discloses a breakwater system for use in a body of water having a floor. Waters' breakwater system comprises first and second support members (1) adapted to be positioned on the floor of the body of water. Waters further discloses a curtain 5 attached between the first and second support members wherein the support members allow the curtain to rise freely in response to waves. The first and second support members include a bottom frame section 1 and a top frame section 3 pivotally connected to the bottom frame section. Waters also discloses at least one floatation device 7 attached along the upper edge of the curtain 5.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kellner as applied to claim 1 above, and further in view of Shea (5,758,868).

Regarding claims 2, 3 and 5-7, Kellner discloses the breakwater system as described above. However, Kellner fails to disclose that the system comprises a curtain with looped

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sections, as well as attachment sleeves with brackets. Shea discloses a fence system to prevent wind and water from eroding soil wherein the system comprises a curtain 11 and looped sections formed in the curtain 11 at each end to attach the curtain to the fence system. The looped sections are threaded into the curtain. Furthermore, Shea discloses first and second attachment sleeves at opposite ends of the curtain wherein the attachment sleeves are slidably mounted on parts 16 of the fence system. Shea further discloses that each attachment sleeve comprises a pair of brackets 13 having central indented sections 12 whereby flanges are formed on each side of the central indented section. The brackets and indented sections are arranged to enclose a corresponding part of the fence system 16 and to sandwich the curtain 11.

It would have been obvious to one of ordinary skill in the art to combine Kellner's breakwater inventions with the looped section and attachment sleeve teachings of Shea because Shea's and Kellner's inventions serve common purposes. Both of the inventions serve to protect soils from eroding forces such as water or wind. One of ordinary skill in the art could easily apply Shea's attachment sleeve and looped sections to Kellner's system because it would merely be considered substituting one well known means of connecting a curtain to a support as evidenced by Shea. Furthermore, the sleeves provide the capability to releasably secure smaller portions of the breakwater together making it more convenient to transport and to assemble or disassemble.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kellner and Shea as applied to claim 2 above, and further in view of Coffey (4,921,373).

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Regarding claim 4, Kellner and Shea disclose the systems described above but fail to disclose looped sections wherein the sections are formed by hook-and-loop attachment. Coffey discloses a water barrier for use in bodies of water wherein Velcro<sup>®</sup> is used to fasten fabric 35 to itself.

It would have been obvious to one of ordinary skill in the art to take the inventions of Kellner and Shea and to add the use of Velcro<sup>®</sup> to fasten materials together, as taught by Coffey, because hook-and-loop fasteners, such as Velcro, are a commonly used method of fastening materials to other materials or other substrates.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kellner as applied to claim 1 above, and further in view of Ploeg et al (4,836,709).

Regarding claim 8, Kellner discloses the breakwater system as described above. However, Kellner fails to explicitly disclose that the curtain is made of energy absorbing material. Ploeg et al disclose a water wave absorbing material 30.

It would have been obvious to one of ordinary skill in the art to combine Kellner's invention with Ploeger et al's teaching of using a water wave absorbing material in a wave breaking system because the properties of the material would further assist the breakwater system user to achieve greater wave breaking results. Although Ploeg et al mention that such a material could be used in laboratory environments it would be obvious to one of ordinary skill in the art to apply the material wherever one desires water wave absorbing effects, such as in a breakwater structure. Applicant should also note that any material would have the capability of absorbing energy to the degree claimed by the applicant.

10. As best understood, claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waters as applied to claims 11 and 12 above, and further in view of Clark (4,738,563).

Regarding claim 13, Waters discloses a breakwater system as described above. However, Waters fails to disclose that the system comprises a curtain section attached to the bottom frame section and top frame section of the system. Clark discloses a marine fence system wherein the bottom frame section 5 and top frame sections 2 are attached to a curtain section 3.

It would have been obvious to one of ordinary skill in the art to combine Waters' breakwater structure with the attachment teachings of Clark because Clark's teaching of more extensive curtain coverage clearly provides a greater area of resistance to oncoming matter. Although Clark explicitly mentions deterrence or reduction of animals toward the shore, it would be obvious to one of ordinary skill in the art that use of Clark's more extensive curtain would also reduce wave energy transferring from one side of the breakwater to the other, thereby increasing the efficiency of the breakwater.

11. As best understood, claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waters as applied to claim 11 above, and further in view of Gingrich et al (5,875,597). Regarding claims 14 and 15, Waters discloses the breakwater system as described above. However, Waters fails to disclose that the system includes support members with longitudinally sliding members. Gingrich et al disclose a height-adjustable space dividing screen assembly 10 wherein first and second support members 11 include a bottom frame section 16

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and top frame section 17 mounted on the bottom frame section to longitudinally slide thereon.

Gingrich et al further disclose that the curtain 12 is attached entirely to the top frame section.

It would have been obvious to one of ordinary skill in the art to combine Waters breakwater system with Gingrich's teaching of providing longitudinally sliding supports in a curtain system because the sliding feature provides the capability to adjust the height of the curtain assembly as necessary, thereby increasing the usefulness of the inventions.

12. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waters as applied to claim 11 above, and further in view of Kellner (887,201).

Regarding claims 16-20, Waters discloses the breakwater system as described above. However, Waters fails to disclose that the breakwater system comprises base plates and weights. Kellner discloses a breakwater system comprising a curtain 8 and means (5,6,7) for attaching the curtain to the underwater breakwater structure. Kellner further discloses a base plate 13 and one or more weights 12 mounted on the base plate through the frame assembly. Kellner further discloses a supplemental base plate 13 and connector element 15 extending between the supplemental base plate and frame assembly.

It would have been obvious to one of ordinary skill in the art to combine Waters breakwater system with Kellner's teachings of base plates and weights because these elements provide ways of restraining the breakwater from drifting to undesired locations. Furthermore, they improve the effectiveness of the breakwater by providing additional mass to resist and diminish oncoming water wave energy.



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13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waters as applied to claim 11 above, and further in view of Ploeg et al (4,836,709). Regarding claim 21, Waters discloses the breakwater system as described above. However, Waters fails to explicitly disclose that the curtain is made from energy absorbing material. Ploeg et al disclose a water wave absorbing material 30.

It would have been obvious to one of ordinary skill in the art to combine Waters' invention with Ploeger et al's teaching of using a water wave absorbing material in a wave breaking system because the properties of the material would further assist the breakwater system user to achieve greater wave breaking results. Although Ploeg et al mention that such a material could be used in laboratory environments it would be obvious to one of ordinary skill in the art to apply the material wherever one desires water wave absorbing effects, such as in a breakwater structure. Furthermore, the applicant should also note that any material would have the capability of absorbing energy to the degree as claimed by the applicant.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone numbers

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for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Lisa M. Saldano  
Examiner  
Art Unit 3673

August 19, 2002



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